

PART E.4 – SUMMARY OF SUBMITTED BIOMONITORING TEST INFORMATION

CITY OF HELENA WASTEWATER TREATMENT FACILITY, MT-0022641 2017 PERMIT APPLICATION

Chronic toxicity testing has been completed quarterly and submitted to the Montana Department of Environmental Quality for the past 4-1/2 years in accordance with the facilities' current NPDES permit. Below is a summary of the date of the test and the result of the test.

TEST	LAB REPORT DATE	CERIODAPHNIA DUBIA ³	PRIMEPHALES PROMELAS ⁴
2013 Q1	2/27/2013	PASS	PASS
2013 Q2	4/11/2013	PASS	PASS
2013 Q3	8/6/2013	PASS	PASS
2013 Q4	12/19/13 & 12/31/13	PASS (12/19/13)	PASS (12/31/13)
2014 Q1	2/14/2014	PASS	PASS
2014 Q2	4/23/2014	PASS	PASS
2014 Q3	8/13/2014	PASS	PASS
2014 Q4	11/10/2014	PASS	PASS
2015 Q1	2/3/2015	PASS	PASS
2015 Q2	4/29/2015	INVALID ¹	PASS
2015 Q3	8/3/2015	PASS	PASS
2015 Q4	11/24/2015	PASS	PASS
2016 Q1	2/7/2016	PASS	PASS
2016 Q2	4/25/2016	PASS	PASS
2016 Q3	7/26/2016	PASS	PASS
2016 Q4	10/20/2016	PASS	PASS
2017 Q1	1/30/2017	PASS	PASS
2017 Q2	5/1/2017	FAIL ²	PASS
2017 Q2	5/15/2017	PASS	NOT TESTED

- 1) Test was invalid due to >20% mortality in the river control.
- 2) Test failed due to high ammonia concentration in the effluent sample. Retest performed for only Ceriodaphnia Dubia.
- 3) Ceriodaphnia Dubia toxicity test to estimate chronic toxicity per EPA-821-R-02-013 Fourth Edition October 2002; method 1002.0 – Ceriodaphnia dubia Survival & Reproduction Test.
- 4) Pimephales promelas 7-day toxicity test to estimate chronic toxicity per EPA-821-R-02-013 Fourth Edition October 2002; method 1000.0 Fathead Minnow Survival & Growth Test.